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## NOTICE OF ALLOWANCE AND FEE(S) DUE

23640 7590 03/20/2008

BAKER BOTTS, LLP  
910 LOUISIANA  
HOUSTON, TX 77002-4995

EXAMINER

LAU, TUNG S

ART UNIT

PAPER NUMBER

2863

DATE MAILED: 03/20/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/774,240

02/06/2004

Richard E. Waitkus JR.

016093.0118

9102

TITLE OF INVENTION: SYSTEMS AND METHODS FOR MATERIAL MANAGEMENT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$720	\$0	\$0	\$720	06/20/2008

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

### HOW TO REPLY TO THIS NOTICE:

#### I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

# **PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE  
Commissioner for Patents  
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Alexandria, Virginia 22313-1450  
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

23640 7590 03/20/2008

**BAKER BOTTS, LLP**  
910 LOUISIANA  
HOUSTON, TX 77002-4995

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

## **Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/774,240 02/06/2004 Richard E. Waitkus JR. 016093.0118 9102

TITLE OF INVENTION: SYSTEMS AND METHODS FOR MATERIAL MANAGEMENT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
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nonprovisional YES \$720 \$0 \$0 \$720 06/20/2008

EXAMINER	ART UNIT	CLASS-SUBCLASS
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LAU, TUNG S 2863 702-188000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_
- 3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,240	02/06/2004	Richard E. Waitkus JR.	016093.0118	9102
23640	7590	03/20/2008	EXAMINER	
BAKER BOTTS, LLP 910 LOUISIANA HOUSTON, TX 77002-4995			LAU, TUNG S	
			ART UNIT	PAPER NUMBER
			2863	
DATE MAILED: 03/20/2008				

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

**Notice of Allowability**

Application No.

10/774,240

Examiner

TUNG S. LAU

Applicant(s)

WAITKUS, RICHARD E.

Art Unit

2863

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 02/11/2008.
2. ☒ The allowed claim(s) is/are 1, 3, 4, 6-29, and 31.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date ____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date ____     | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|  | 9. <input type="checkbox"/> Other ____.   |

## DETAILED ACTION

### Drawing

1. Drawing filed on 02/06/2004 has been accepted by the examiner.

### EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Bradley S. Bowling Registration # 52,641 Telephone # 713-229-1802 on March 6, 2008.

The application has been amended as follows:

Cancel claims 5, 30 and 32.

Replace claims 1, 4, 15, 24, 29 and 31 with:

1. (Currently amended) A material management system including:
  - one or more waste containers adapted to receive and compact waste;
  - a fullness-measuring subsystem for determining the fullness of one or more waste containers;
  - a computerized scheduling subsystem in communication with the fullness-measuring subsystem for automatically determining an optimal time to empty each waste container, the computerized scheduling subsystem comprising:  
at least one processor; and

a memory, the memory comprising executable instructions that, when executed, cause the at least one processor to determine an optimal time to empty each waste container based on:

the fullness of the waste container; and

scheduling factors including:

customer preferences; and

waste hauler limitations;

where the waste hauler limitations include one or more limitations selected from the group consisting of:

a number of drivers available at a specified time;

a number of trucks available at a specified time;

a distance from the waste hauler to the customer's waste container;

a distance from the customer's waste container to the material receiving site;

operating hours of the waste hauler's dispatcher/routing office; and

operating hours of a company that schedules hauls with the waste hauler

, and

where the computerized scheduling subsystem stores at least one scheduling factor before determining the optimal time to empty each waste container.

4. (Currently amended) The material management system of claim 1, where the customer preferences considered by the computerized scheduling sub-system include one or more preferences selected from the group consisting of:
  - a preference that the customer's waste container only reach a certain level of fullness;
  - a preference that the customer's waste container reach a certain level of fullness;
  - a preference that the customer's waste container not be emptied on certain days of the week; and
  - a preference that the customer's waste container not be emptied during certain hours of the day.
  
15. (Currently amended) A computerized method for scheduling a pick up time to remove of one or more waste containers, including, for each waste container:
  - automatically determining a fullness of the waste container;
  - automatically determining when a waste container will a target level of fullness, based on the current fullness and predicted future usage;
  - storing at least one scheduling factor selected from the group of scheduling factors consisting of customer preferences and waste hauler limitations;
  - automatically determining an optimal time to remove the waste container, based on:
    - when the waste container will reach the target level of fullness;
    - customer preferences; and
    - waste hauler limitations; and
  - automatically scheduling the removal of the waste container for the optimal time;

where the waste hauler limitations include one or more limitations selected from the group consisting of:

  - a number of drivers available at a specified time;
  - a number of trucks available at a specified time;

a distance from the waste hauler to the customer's waste container;  
a distance from the customer's waste container to the material  
receiving site;  
operating hours of the waste hauler's dispatcher/routing office; and  
operating hours of a company that schedules hauls with the waste  
hauler.

24. (Currently amended) A computer program, stored on a tangible storage medium, for use in scheduling a pick up time to remove one or more waste containers, the computer program including executable instructions that cause a computer to, for each waste container:

determine a fullness of the waste container;  
determine when the waste container will reach a target level of fullness, based on  
the current fullness and predicted future usage;  
storing at least one scheduling factor selected from the group of scheduling  
factors consisting of customer preferences and waste hauler limitations;  
determine an optimal time to remove the waste container, based on:  
when the waste container will reach the target level of fullness;  
customer preferences; and  
waste hauler limitations; and  
schedule the removal of the waste container for the optimal time;

where the waste hauler limitations include one or more limitations selected  
from the group consisting of:

a number of drivers available at a specified time;  
a number of trucks available at a specified time;  
a distance from the waste hauler to the customer's waste container;  
a distance from the customer's waste container to the material  
receiving site;



operating hours of the waste hauler's dispatcher/routing office; and  
operating hours of a company that schedules hauls with the waste  
hauler.

29. (Currently amended) The method of claim 15, where the customer preferences include one or more preferences selected from the group consisting of:
- a preference that the customer's waste container only reach a certain level of fullness;
  - a preference that the customer's waste container reach a certain level of fullness;
  - a preference that the customer's waste container not be emptied on certain days of the week; and
  - a preference that the customer's waste container not be emptied during certain hours of the day.
31. (Currently amended) The computer program of claim 24, where the customer preferences include one or more preferences selected from the group consisting of:
- a preference that the customer's waste container only reach a certain level of fullness;
  - a preference that the customer's waste container reach a certain level of fullness;
  - a preference that the customer's waste container not be emptied on certain days of the week; and
  - a preference that the customer's waste container not be emptied during certain hours of the day.

Remarks: Amendments to the claims were made to define over the applied prior art. The additional step of “where the waste hauler limitations include one or more limitations selected from the group consisting of: a number of drivers available at a specified time; a number of trucks available at a specified time; a distance from the waste hauler to the customer's waste container; a distance from the customer's waste container to the material receiving site; operating hours of the waste hauler's dispatcher/routing office; and operating hours of a company that schedules hauls with the waste hauler” now positively claims the system defined in the specification. This system is deemed to be non-obvious over the systems of the prior art.

***Allowable Subject Matter***

3. Claims 1, 3, 4, 6-29, and 31 are allowed.

***Reasons for Allowance***

4. The following is an examiner's statement of reasons for allowance:
- Independent claims 1, 15 and 24 contain allowable subject matter. None of the prior art of record shows or fairly suggests the claimed invention.

Regarding claim 1:

The primary reason for the allowance of claim 1 is the inclusion of the waste hauler limitations include one or more limitations selected from the group consisting of: a number of drivers available at a specified time; a number of

trucks available at a specified time; a distance from the waste hauler to the customer's waste container; a distance from the customer's waste container to the material receiving site; operating hours of the waste hauler's dispatcher/routing office; and operating hours of a company that schedules hauls with the waste hauler. It is these features found in the claim, as they are claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes this claim allowable over the prior art.

Regarding claim 15:

The primary reason for the allowance of claim 15 is the inclusion of a computerized method for scheduling a pick up time to remove of one or more waste containers, including, for each waste container including the waste hauler limitations include one or more limitations selected from the group consisting of: a number of drivers available at a specified time; a number of trucks available at a specified time; a distance from the waste hauler to the customer's waste container; a distance from the customer's waste container to the material receiving site; operating hours of the waste hauler's dispatcher/routing office; and operating hours of a company that schedules hauls with the waste hauler. It is these features found in the claim, as they are claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes this claim allowable over the prior art.

Regarding claim 24:

The primary reason for the allowance of claim 24 is the inclusion of a computer program, stored on a tangible storage medium, for use in scheduling a pick up time to remove one or more waste containers, the computer program including executable instructions that cause a computer to, for each waste container including the waste hauler limitations include one or more limitations selected from the group consisting of: a number of drivers available at a specified time; a number of trucks available at a specified time; a distance from the waste hauler to the customer's waste container; a distance from the customer's waste container to the material receiving site; operating hours of the waste hauler's dispatcher/routing office; and operating hours of a company that schedules hauls with the waste hauler. It is these features found in the claim, as they are claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes this claim allowable over the prior art.

Claims 3, 4, 6-14 are allowed due to their dependency on claim 1.

Claims 16-23 and 29 are allowed due to their dependency on claim 15.

Claims 25-28 and 31 are allowed due to their dependency on claim 24.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should

preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

**Contact information**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung S. Lau whose telephone number is 571-272-2274. The examiner can normally be reached on M-F 9-5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 571-272-2269. The fax phone numbers for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Tung S. Lau/  
Tung S. Lau, Art Unit 2863  
Primary Examiner  
March 10, 2008